

Date: Sun, 8 May 94 04:30:30 PDT
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Ham-Space-Errors@UCSD.Edu
Reply-To: Ham-Space@UCSD.Edu
Precedence: Bulk
Subject: Ham-Space Digest V94 #117
To: Ham-Space

Ham-Space Digest Sun, 8 May 94 Volume 94 : Issue 117

Today's Topics:

Mac Satellite Tracking Program
MIR station
ORBS\$126.2L.AMSAT
ORBS\$126.MICRO.AMSAT
ORBS\$126.MISC.AMSAT
ORBS\$126.OSCAR.AMSAT
ORBS\$126.WEATH.AMSAT
Russian space station MIR

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 7 May 94 14:47:28 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!math.ohio-state.edu!
cyber2.cyberstore.ca!nwnexus!ole!rwing!eskimo!aandh@network.ucsd.edu
Subject: Mac Satellite Tracking Program
To: ham-space@ucsd.edu

Hi, JOHN check this mo qst had info from Amsat on traking program for
Mac
73 Jim UA4PDG/K7UDG

Date: Sat, 7 May 1994 04:49:23 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!vixen.cso.uiuc.edu!
usenet.ucs.indiana.edu!nickel.ucs.indiana.edu!alwalsh@network.ucsd.edu

Subject: MIR station
To: ham-space@ucsd.edu

In article <85@ce6fyn.radio.cl>,
Juan Carlos y Cesar Hoyuela <ce6fyn@enlaces.ufro.cl> wrote:
>Hi I'm interesting in contac with, MIR
>anyone now what is the operating frequency by packet or fone in
>VHF.
>
>please send msg: ce6fyn@ce6fyn.radio.cl

You can work MIR on 145.55mhz.

Good luck and 73.

-Alan

Date: Fri, 6 May 1994 07:35:00 MDT
From: tribune.usask.ca!kakwa.ucs.ualberta.ca!quartz.ucs.ualberta.ca!alberta!
ve6mgs!usenet@decwrl.dec.com
Subject: ORBS\$126.2L.AMSAT
To: ham-space@ucsd.edu

SB KEPS @ AMSAT \$ORBS-126.N
2Line Orbital Elements 126.AMSAT

HR AMSAT ORBITAL ELEMENTS FOR AMATEUR SATELLITES IN NASA FORMAT
FROM WA5QGD FORT WORTH,TX May 6, 1994
BID: \$ORBS-126.N

DECODE 2-LINE ELSETS WITH THE FOLLOWING KEY:
1 AAAAAU 00 0 0 BBBB.BBBBBBBB .CCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

TO ALL RADIO AMATEURS BT

AO-10

1 14129U 83058B 94114.79345608 -.000000048 00000-0 10000-3 0 2756
2 14129 27.1659 330.6978 6021287 173.0169 202.1666 2.05879661 81688

UO-11

1 14781U 84021B 94121.50940340 .000000196 00000-0 41030-4 0 6858
2 14781 97.7888 138.4184 0013044 60.7255 299.5253 14.69199714543453

RS-10/11

1 18129U 87054A 94124.10557735 .000000155 00000-0 15346-3 0 8945

2	18129	82.9268	1.4316	0012217	139.7745	220.4499	13.72337575343869
AO-13							
1	19216U	88051B	94124.38270944	-.00000711	00000-0	10000-4 0	9072
2	19216	57.8186	254.4324	7215430	340.4805	2.0450	2.09726814 45094
FO-20							
1	20480U	90013C	94123.46226144	-.00000027	00000-0	44326-5 0	6806
2	20480	99.0307	283.7490	0541291	80.7567	285.4319	12.83225461198398
AO-21							
1	21087U	91006A	94124.13934910	.00000094	00000-0	82657-4 0	4602
2	21087	82.9448	175.3061	0034211	204.5459	155.4070	13.74538688163531
RS-12/13							
1	21089U	91007A	94125.20169600	.00000049	00000-0	35936-4 0	6846
2	21089	82.9227	43.3261	0027609	227.9190	131.9616	13.74039911162740
ARSENE							
1	22654U	93031B	94124.94294243	-.00000120	00000-0	00000 0 0	2516
2	22654	1.7729	101.4452	2921942	180.0752	180.1868	1.42202361 582
UO-14							
1	20437U	90005B	94124.20914538	.00000048	00000-0	35670-4 0	9854
2	20437	98.5906	209.5802	0010866	325.4635	34.5845	14.29840229223300
AO-16							
1	20439U	90005D	94124.19642159	.00000047	00000-0	35163-4 0	7855
2	20439	98.5995	210.7561	0011022	326.4829	33.5660	14.29894404223316
DO-17							
1	20440U	90005E	94123.24545814	.00000049	00000-0	35934-4 0	7849
2	20440	98.5999	210.1236	0011292	328.2125	31.8370	14.30033516223199
WO-18							
1	20441U	90005F	94124.26952701	.00000035	00000-0	30609-4 0	7861
2	20441	98.5998	211.1390	0011926	325.3145	34.7256	14.30008193223340
LO-19							
1	20442U	90005G	94125.23015124	.00000054	00000-0	37901-4 0	7840
2	20442	98.5968	212.3325	0011929	321.6769	38.3568	14.30104065223490
UO-22							
1	21575U	91050B	94124.19704613	.00000068	00000-0	37532-4 0	4876
2	21575	98.4373	199.5777	0008746	62.7150	297.4930	14.36911301146764
KO-23							
1	22077U	92052B	94124.15495470	-.00000037	00000-0	10000-3 0	3822
2	22077	66.0837	12.1755	0013264	298.7386	61.2299	12.86285580 81126
AO-27							
1	22825U	93061C	94121.20829173	.00000061	00000-0	42616-4 0	2811
2	22825	98.6565	197.4833	0009082	352.4372	7.6673	14.27620742 30984
IO-26							
1	22826U	93061D	94125.18734415	.00000029	00000-0	29603-4 0	2823
2	22826	98.6561	201.4545	0009557	342.2965	17.7898	14.27724379 31555
KO-25							
1	22830U	93061H	94124.22670221	.00000044	00000-0	35042-4 0	2850
2	22830	98.5577	198.2216	0011176	310.2112	49.8089	14.28050061 31428
NOAA-9							
1	15427U	84123A	94116.57301527	.00000079	00000-0	66156-4 0	7989

2 15427 99.0577 166.4449 0015509 8.6358 351.5077 14.13609653483058
 NOAA-10
 1 16969U 86073A 94120.19649106 -.00000019 00000-0 10000-4 0 7014
 2 16969 98.5128 130.6674 0012795 103.3153 256.9287 14.24880247395773
 MET-2/17
 1 18820U 88005A 94124.01702454 .00000004 00000-0 -91349-5 0 2835
 2 18820 82.5393 303.7245 0016034 309.9437 50.0314 13.84714176316245
 MET-3/2
 1 19336U 88064A 94123.56735553 .00000051 00000-0 10000-3 0 2809
 2 19336 82.5431 355.2630 0018414 17.7279 342.4475 13.16966951277385
 NOAA-11
 1 19531U 88089A 94124.23880605 .00000065 00000-0 59988-4 0 6243
 2 19531 99.1695 112.0777 0010844 258.7118 101.2834 14.12980952289014
 MET-2/18
 1 19851U 89018A 94124.20611987 .00000064 00000-0 43646-4 0 2826
 2 19851 82.5208 178.9830 0014331 357.6373 2.4716 13.84363931261609
 MET-3/3
 1 20305U 89086A 94123.13024986 .00000044 00000-0 10000-3 0 356
 2 20305 82.5506 301.1352 0008080 47.0743 313.1046 13.04426156217026
 MET-2/19
 1 20670U 90057A 94123.34265584 .00000023 00000-0 79036-5 0 7849
 2 20670 82.5437 244.0769 0014580 275.8461 84.1027 13.84188432194412
 FY-1/2
 1 20788U 90081A 94125.06255617 .00000294 00000-0 22339-3 0 9577
 2 20788 98.8362 146.5700 0015892 125.8309 234.4338 14.01325006187666
 MET-2/20
 1 20826U 90086A 94124.19626608 .00000062 00000-0 42312-4 0 7935
 2 20826 82.5272 180.9782 0013109 164.3711 195.7842 13.83580182181676
 MET-3/4
 1 21232U 91030A 94125.22936710 .00000050 00000-0 10000-3 0 6912
 2 21232 82.5450 199.9590 0012139 298.5027 61.4870 13.16461976145704
 NOAA-12
 1 21263U 91032A 94124.37029890 .00000129 00000-0 77309-4 0 293
 2 21263 98.6231 153.1074 0013424 8.7050 351.4362 14.22399088154303
 MET-3/5
 1 21655U 91056A 94124.14072292 .00000051 00000-0 10000-3 0 6994
 2 21655 82.5543 147.8549 0012817 313.9632 46.0416 13.16830086130665
 MET-2/21
 1 22782U 93055A 94124.23599147 .00000061 00000-0 42692-4 0 2934
 2 22782 82.5467 241.2542 0022783 353.1737 6.9124 13.83005015 34012
 POSAT
 1 22829U 93061G 94124.23109781 .00000049 00000-0 37665-4 0 2754
 2 22829 98.6526 200.5271 0010115 330.9363 29.1250 14.28021851 31424
 MIR
 1 16609U 86017A 94125.19327133 .00008914 00000-0 11866-3 0 5863
 2 16609 51.6474 41.5640 0014555 219.6070 140.3860 15.58904639469344
 HUBBLE
 1 20580U 90037B 94124.36277877 .00000574 00000-0 42139-4 0 4759

2 20580 28.4682 157.4785 0005921 351.8571 8.1918 14.90591197 22840
GRO
1 21225U 91027B 94121.31897665 .00002568 00000-0 54854-4 0 883
2 21225 28.4633 197.4670 0003050 45.9485 314.1339 15.40718015 49703
UARS
1 21701U 91063B 94125.02595764 .00003978 00000-0 36832-3 0 5144
2 21701 56.9874 332.0307 0005158 90.9475 269.2149 14.96482672144475
/EX

Date: Fri, 6 May 1994 07:31:00 MDT
From: tribune.usask.ca!kakwa.ucs.ualberta.ca!quartz.ucs.ualberta.ca!alberta!
ve6mgs!usenet@decwrl.dec.com
Subject: ORBS\$126.MICRO.AMSAT
To: ham-space@ucsd.edu

SB KEPS @ AMSAT \$ORBS-126.D
Orbital Elements 126.MICROS

HR AMSAT ORBITAL ELEMENTS FOR THE MICROSATS
FROM WA5QGD FORT WORTH,TX May 6, 1994
BID: \$ORBS-126.D
TO ALL RADIO AMATEURS BT

Satellite: UO-14
Catalog number: 20437
Epoch time: 94124.20914538
Element set: 985
Inclination: 98.5906 deg
RA of node: 209.5802 deg
Eccentricity: 0.0010866
Arg of perigee: 325.4635 deg
Mean anomaly: 34.5845 deg
Mean motion: 14.29840229 rev/day
Decay rate: 4.8e-07 rev/day^2
Epoch rev: 22330
Checksum: 310

Satellite: A0-16
Catalog number: 20439
Epoch time: 94124.19642159
Element set: 785
Inclination: 98.5995 deg
RA of node: 210.7561 deg
Eccentricity: 0.0011022
Arg of perigee: 326.4829 deg
Mean anomaly: 33.5660 deg

Mean motion: 14.29894404 rev/day
Decay rate: 4.7e-07 rev/day²
Epoch rev: 22331
Checksum: 310

Satellite: D0-17
Catalog number: 20440
Epoch time: 94123.24545814
Element set: 784
Inclination: 98.5999 deg
RA of node: 210.1236 deg
Eccentricity: 0.0011292
Arg of perigee: 328.2125 deg
Mean anomaly: 31.8370 deg
Mean motion: 14.30033516 rev/day
Decay rate: 4.9e-07 rev/day²
Epoch rev: 22319
Checksum: 280

Satellite: W0-18
Catalog number: 20441
Epoch time: 94124.26952701
Element set: 786
Inclination: 98.5998 deg
RA of node: 211.1390 deg
Eccentricity: 0.0011926
Arg of perigee: 325.3145 deg
Mean anomaly: 34.7256 deg
Mean motion: 14.30008193 rev/day
Decay rate: 3.5e-07 rev/day²
Epoch rev: 22334
Checksum: 289

Satellite: L0-19
Catalog number: 20442
Epoch time: 94125.23015124
Element set: 784
Inclination: 98.5968 deg
RA of node: 212.3325 deg
Eccentricity: 0.0011929
Arg of perigee: 321.6769 deg
Mean anomaly: 38.3568 deg
Mean motion: 14.30104065 rev/day
Decay rate: 5.4e-07 rev/day²
Epoch rev: 22349
Checksum: 296

Satellite: U0-22

Catalog number: 21575
Epoch time: 94124.19704613
Element set: 487
Inclination: 98.4373 deg
RA of node: 199.5777 deg
Eccentricity: 0.0008746
Arg of perigee: 62.7150 deg
Mean anomaly: 297.4930 deg
Mean motion: 14.36911301 rev/day
Decay rate: 6.8e-07 rev/day²
Epoch rev: 14676
Checksum: 331

Satellite: K0-23
Catalog number: 22077
Epoch time: 94124.15495470
Element set: 382
Inclination: 66.0837 deg
RA of node: 12.1755 deg
Eccentricity: 0.0013264
Arg of perigee: 298.7386 deg
Mean anomaly: 61.2299 deg
Mean motion: 12.86285580 rev/day
Decay rate: -3.7e-07 rev/day²
Epoch rev: 8112
Checksum: 309

Satellite: A0-27
Catalog number: 22825
Epoch time: 94121.20829173
Element set: 281
Inclination: 98.6565 deg
RA of node: 197.4833 deg
Eccentricity: 0.0009082
Arg of perigee: 352.4372 deg
Mean anomaly: 7.6673 deg
Mean motion: 14.27620742 rev/day
Decay rate: 6.1e-07 rev/day²
Epoch rev: 3098
Checksum: 309

Satellite: I0-26
Catalog number: 22826
Epoch time: 94125.18734415
Element set: 282
Inclination: 98.6561 deg
RA of node: 201.4545 deg
Eccentricity: 0.0009557

Arg of perigee: 342.2965 deg
Mean anomaly: 17.7898 deg
Mean motion: 14.27724379 rev/day
Decay rate: 2.9e-07 rev/day^2
Epoch rev: 3155
Checksum: 329

Satellite: K0-25
Catalog number: 22830
Epoch time: 94124.22670221
Element set: 285
Inclination: 98.5577 deg
RA of node: 198.2216 deg
Eccentricity: 0.0011176
Arg of perigee: 310.2112 deg
Mean anomaly: 49.8089 deg
Mean motion: 14.28050061 rev/day
Decay rate: 4.4e-07 rev/day^2
Epoch rev: 3142
Checksum: 269

/EX

Date: Fri, 6 May 1994 07:34:00 MDT
From: tribune.usask.ca!kakwa.ucs.ualberta.ca!quartz.ucs.ualberta.ca!alberta!
ve6mgs!usenet@decwrl.dec.com
Subject: ORBS\$126.MISC.AMSAT
To: ham-space@ucsd.edu

SB KEPS @ AMSAT \$ORBS-126.M
Orbital Elements 126.MISC

HR AMSAT ORBITAL ELEMENTS FOR MANNED AND MISCELLANEOUS SATELLITES
FROM WA5QGD FORT WORTH,TX May 6, 1994
BID: \$ORBS-126.M
TO ALL RADIO AMATEURS BT

Satellite: POSAT
Catalog number: 22829
Epoch time: 94124.23109781
Element set: 275
Inclination: 98.6526 deg
RA of node: 200.5271 deg
Eccentricity: 0.0010115
Arg of perigee: 330.9363 deg
Mean anomaly: 29.1250 deg

Mean motion: 14.28021851 rev/day
Decay rate: 4.9e-07 rev/day²
Epoch rev: 3142
Checksum: 260

Satellite: MIR
Catalog number: 16609
Epoch time: 94125.19327133
Element set: 586
Inclination: 51.6474 deg
RA of node: 41.5640 deg
Eccentricity: 0.0014555
Arg of perigee: 219.6070 deg
Mean anomaly: 140.3860 deg
Mean motion: 15.58904639 rev/day
Decay rate: 8.914e-05 rev/day²
Epoch rev: 46934
Checksum: 311

Satellite: HUBBLE
Catalog number: 20580
Epoch time: 94124.36277877
Element set: 475
Inclination: 28.4682 deg
RA of node: 157.4785 deg
Eccentricity: 0.0005921
Arg of perigee: 351.8571 deg
Mean anomaly: 8.1918 deg
Mean motion: 14.90591197 rev/day
Decay rate: 5.74e-06 rev/day²
Epoch rev: 2284
Checksum: 326

Satellite: GRO
Catalog number: 21225
Epoch time: 94121.31897665
Element set: 88
Inclination: 28.4633 deg
RA of node: 197.4670 deg
Eccentricity: 0.0003050
Arg of perigee: 45.9485 deg
Mean anomaly: 314.1339 deg
Mean motion: 15.40718015 rev/day
Decay rate: 2.568e-05 rev/day²
Epoch rev: 4970
Checksum: 298

Satellite: UARS

Catalog number: 21701
Epoch time: 94125.02595764
Element set: 514
Inclination: 56.9874 deg
RA of node: 332.0307 deg
Eccentricity: 0.0005158
Arg of perigee: 90.9475 deg
Mean anomaly: 269.2149 deg
Mean motion: 14.96482672 rev/day
Decay rate: 3.978e-05 rev/day^2
Epoch rev: 14447
Checksum: 327

/EX

Date: Fri, 6 May 1994 07:30:00 MDT
From: tribune.usask.ca!kakwa.ucs.ualberta.ca!quartz.ucs.ualberta.ca!alberta!
ve6mgs!usenet@decwrl.dec.com
Subject: ORBS\$126.OSCAR.AMSAT
To: ham-space@ucsd.edu

SB KEPS @ AMSAT \$ORBS-126.0
Orbital Elements 126.OSCAR

HR AMSAT ORBITAL ELEMENTS FOR OSCAR SATELLITES
FROM WA5QGD FORT WORTH, TX May 6, 1994
BID: \$ORBS-126.0
TO ALL RADIO AMATEURS BT

Satellite: AO-10
Catalog number: 14129
Epoch time: 94114.79345608
Element set: 275
Inclination: 27.1659 deg
RA of node: 330.6978 deg
Eccentricity: 0.6021287
Arg of perigee: 173.0169 deg
Mean anomaly: 202.1666 deg
Mean motion: 2.05879661 rev/day
Decay rate: -4.8e-07 rev/day^2
Epoch rev: 8168
Checksum: 326

Satellite: UO-11
Catalog number: 14781
Epoch time: 94121.50940340

Element set: 685
Inclination: 97.7888 deg
RA of node: 138.4184 deg
Eccentricity: 0.0013044
Arg of perigee: 60.7255 deg
Mean anomaly: 299.5253 deg
Mean motion: 14.69199714 rev/day
Decay rate: 1.96e-06 rev/day²
Epoch rev: 54345
Checksum: 330

Satellite: RS-10/11
Catalog number: 18129
Epoch time: 94124.10557735
Element set: 894
Inclination: 82.9268 deg
RA of node: 1.4316 deg
Eccentricity: 0.0012217
Arg of perigee: 139.7745 deg
Mean anomaly: 220.4499 deg
Mean motion: 13.72337575 rev/day
Decay rate: 1.55e-06 rev/day²
Epoch rev: 34386
Checksum: 315

Satellite: A0-13
Catalog number: 19216
Epoch time: 94124.38270944
Element set: 907
Inclination: 57.8186 deg
RA of node: 254.4324 deg
Eccentricity: 0.7215430
Arg of perigee: 340.4805 deg
Mean anomaly: 2.0450 deg
Mean motion: 2.09726814 rev/day
Decay rate: -7.11e-06 rev/day²
Epoch rev: 4509
Checksum: 289

Satellite: F0-20
Catalog number: 20480
Epoch time: 94123.46226144
Element set: 680
Inclination: 99.0307 deg
RA of node: 283.7490 deg
Eccentricity: 0.0541291
Arg of perigee: 80.7567 deg
Mean anomaly: 285.4319 deg

Mean motion: 12.83225461 rev/day
Decay rate: -2.7e-07 rev/day^2
Epoch rev: 19839
Checksum: 311

Satellite: A0-21
Catalog number: 21087
Epoch time: 94124.13934910
Element set: 460
Inclination: 82.9448 deg
RA of node: 175.3061 deg
Eccentricity: 0.0034211
Arg of perigee: 204.5459 deg
Mean anomaly: 155.4070 deg
Mean motion: 13.74538688 rev/day
Decay rate: 9.4e-07 rev/day^2
Epoch rev: 16353
Checksum: 296

Satellite: RS-12/13
Catalog number: 21089
Epoch time: 94125.20169600
Element set: 684
Inclination: 82.9227 deg
RA of node: 43.3261 deg
Eccentricity: 0.0027609
Arg of perigee: 227.9190 deg
Mean anomaly: 131.9616 deg
Mean motion: 13.74039911 rev/day
Decay rate: 4.9e-07 rev/day^2
Epoch rev: 16274
Checksum: 302

Satellite: ARSENE
Catalog number: 22654
Epoch time: 94124.94294243
Element set: 251
Inclination: 1.7729 deg
RA of node: 101.4452 deg
Eccentricity: 0.2921942
Arg of perigee: 180.0752 deg
Mean anomaly: 180.1868 deg
Mean motion: 1.42202361 rev/day
Decay rate: -1.20e-06 rev/day^2
Epoch rev: 58
Checksum: 258

/EX

Date: Fri, 6 May 1994 07:33:00 MDT
From: tribune.usask.ca!kakwa.ucs.ualberta.ca!quartz.ucs.ualberta.ca!alberta!
ve6mgs!usenet@decwrl.dec.com
Subject: ORBS\$126.WEATH.AMSAT
To: ham-space@ucsd.edu

SB KEPS @ AMSAT \$ORBS-126.W
Orbital Elements 126.WEATHER

HR AMSAT ORBITAL ELEMENTS FOR WEATHER SATELLITES
FROM WA5QGD FORT WORTH, TX May 6, 1994
BID: \$ORBS-126.W
TO ALL RADIO AMATEURS BT

Satellite: NOAA-9
Catalog number: 15427
Epoch time: 94116.57301527
Element set: 798
Inclination: 99.0577 deg
RA of node: 166.4449 deg
Eccentricity: 0.0015509
Arg of perigee: 8.6358 deg
Mean anomaly: 351.5077 deg
Mean motion: 14.13609653 rev/day
Decay rate: 7.9e-07 rev/day^2
Epoch rev: 48305
Checksum: 337

Satellite: NOAA-10
Catalog number: 16969
Epoch time: 94120.19649106
Element set: 701
Inclination: 98.5128 deg
RA of node: 130.6674 deg
Eccentricity: 0.0012795
Arg of perigee: 103.3153 deg
Mean anomaly: 256.9287 deg
Mean motion: 14.24880247 rev/day
Decay rate: -1.9e-07 rev/day^2
Epoch rev: 39577
Checksum: 324

Satellite: MET-2/17
Catalog number: 18820
Epoch time: 94124.01702454

Element set: 283
Inclination: 82.5393 deg
RA of node: 303.7245 deg
Eccentricity: 0.0016034
Arg of perigee: 309.9437 deg
Mean anomaly: 50.0314 deg
Mean motion: 13.84714176 rev/day
Decay rate: 4.0e-08 rev/day^2
Epoch rev: 31624
Checksum: 275

Satellite: MET-3/2
Catalog number: 19336
Epoch time: 94123.56735553
Element set: 280
Inclination: 82.5431 deg
RA of node: 355.2630 deg
Eccentricity: 0.0018414
Arg of perigee: 17.7279 deg
Mean anomaly: 342.4475 deg
Mean motion: 13.16966951 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 27738
Checksum: 313

Satellite: NOAA-11
Catalog number: 19531
Epoch time: 94124.23880605
Element set: 624
Inclination: 99.1695 deg
RA of node: 112.0777 deg
Eccentricity: 0.0010844
Arg of perigee: 258.7118 deg
Mean anomaly: 101.2834 deg
Mean motion: 14.12980952 rev/day
Decay rate: 6.5e-07 rev/day^2
Epoch rev: 28901
Checksum: 300

Satellite: MET-2/18
Catalog number: 19851
Epoch time: 94124.20611987
Element set: 282
Inclination: 82.5208 deg
RA of node: 178.9830 deg
Eccentricity: 0.0014331
Arg of perigee: 357.6373 deg
Mean anomaly: 2.4716 deg

Mean motion: 13.84363931 rev/day
Decay rate: 6.4e-07 rev/day^2
Epoch rev: 26160
Checksum: 305

Satellite: MET-3/3
Catalog number: 20305
Epoch time: 94123.13024986
Element set: 35
Inclination: 82.5506 deg
RA of node: 301.1352 deg
Eccentricity: 0.0008080
Arg of perigee: 47.0743 deg
Mean anomaly: 313.1046 deg
Mean motion: 13.04426156 rev/day
Decay rate: 4.4e-07 rev/day^2
Epoch rev: 21702
Checksum: 239

Satellite: MET-2/19
Catalog number: 20670
Epoch time: 94123.34265584
Element set: 784
Inclination: 82.5437 deg
RA of node: 244.0769 deg
Eccentricity: 0.0014580
Arg of perigee: 275.8461 deg
Mean anomaly: 84.1027 deg
Mean motion: 13.84188432 rev/day
Decay rate: 2.3e-07 rev/day^2
Epoch rev: 19441
Checksum: 313

Satellite: FY-1/2
Catalog number: 20788
Epoch time: 94125.06255617
Element set: 957
Inclination: 98.8362 deg
RA of node: 146.5700 deg
Eccentricity: 0.0015892
Arg of perigee: 125.8309 deg
Mean anomaly: 234.4338 deg
Mean motion: 14.01325006 rev/day
Decay rate: 2.94e-06 rev/day^2
Epoch rev: 18766
Checksum: 316

Satellite: MET-2/20

Catalog number: 20826
Epoch time: 94124.19626608
Element set: 793
Inclination: 82.5272 deg
RA of node: 180.9782 deg
Eccentricity: 0.0013109
Arg of perigee: 164.3711 deg
Mean anomaly: 195.7842 deg
Mean motion: 13.83580182 rev/day
Decay rate: 6.2e-07 rev/day²
Epoch rev: 18167
Checksum: 314

Satellite: MET-3/4
Catalog number: 21232
Epoch time: 94125.22936710
Element set: 691
Inclination: 82.5450 deg
RA of node: 199.9590 deg
Eccentricity: 0.0012139
Arg of perigee: 298.5027 deg
Mean anomaly: 61.4870 deg
Mean motion: 13.16461976 rev/day
Decay rate: 5.0e-07 rev/day²
Epoch rev: 14570
Checksum: 302

Satellite: NOAA-12
Catalog number: 21263
Epoch time: 94124.37029890
Element set: 29
Inclination: 98.6231 deg
RA of node: 153.1074 deg
Eccentricity: 0.0013424
Arg of perigee: 8.7050 deg
Mean anomaly: 351.4362 deg
Mean motion: 14.22399088 rev/day
Decay rate: 1.29e-06 rev/day²
Epoch rev: 15430
Checksum: 275

Satellite: MET-3/5
Catalog number: 21655
Epoch time: 94124.14072292
Element set: 699
Inclination: 82.5543 deg
RA of node: 147.8549 deg
Eccentricity: 0.0012817

Arg of perigee: 313.9632 deg
Mean anomaly: 46.0416 deg
Mean motion: 13.16830086 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 13066
Checksum: 299

Satellite: MET-2/21
Catalog number: 22782
Epoch time: 94124.23599147
Element set: 293
Inclination: 82.5467 deg
RA of node: 241.2542 deg
Eccentricity: 0.0022783
Arg of perigee: 353.1737 deg
Mean anomaly: 6.9124 deg
Mean motion: 13.83005015 rev/day
Decay rate: 6.1e-07 rev/day^2
Epoch rev: 3401
Checksum: 277

/EX

Date: Sat, 7 May 1994 04:48:07 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!vixen.cso.uiuc.edu!
usenet.ucs.indiana.edu!nickel.ucs.indiana.edu!alwalsh@network.ucsd.edu
Subject: Russian space station MIR
To: ham-space@ucsd.edu

In article <2q6ar5\$4f9@amhux3.amherst.edu>,
Jared Barney Hertzberg <jbhertz@unix.amherst.edu> wrote:
>Can anyone tell me what MIR's uplink and downlink frequencies are, how often
>they are likely to transmit, and whether there are any hams aboard at this
>time?
>
>Thanks.
> -Jared Hertzberg N2YES
> jbhertz@amhux3.amherst.edu
>

The uplink and downlink are the same - 145.55. There's no set schedule as far as I know, they just transmit whenever their work schedule permits. I'm pretty sure that the 1200b packet station is almost always up. And for as long as I can remember (last couple of years), every cosmonaut aboard MIR is a ham. Watch this newsgroup and your local PBBS for info on who's on board and what call sign they are currently using.

Happy hunting and 73!

-Alan

End of Ham-Space Digest V94 #117
